

## 透過比較考評局數據實踐促進學習的評估（教學建議）

透過網上試題學習平台（OQB）的試題分析報告功能，教師可輕易比較學生答對率及考評局合格率（個別題目於當年公開試的合格率），除了掌握自己任教學生對比全香港學生的學習表現外，更可以針對學生的弱項調整教學策略，實踐**促進學習的評估**。

針對每份已派發的評估，OQB 平台提供四種不同的報告，其中**試題分析報告**除了比較參與學生的答對率及考評局的合格率，更有圖表顯示評估中每條題目的學生答案分佈，讓教師能針對性地與學生討論題目，提升學與教效能。

### 試題分析報告頁面

The screenshot shows the 'Question Analysis' report page. It features a table with columns for Paper Question No., Student Correctness, HKEAA Correctness, Author, Package, Year, Question No., Topic, Level of Difficulty, and Type. The table lists five questions related to 'Force and Motion'. Annotations include:

- 教師可以考評局合格率比較學生於每條題目的答對率 (Teacher can compare student correctness with HKEAA correctness for each question.)
- 表格內同時顯示每條題目的深淺程度，方便教師作出整體分析 (The table also shows the difficulty level of each question, facilitating overall analysis.)
- 點擊個別題號可進入個別題目分析頁面作詳細分析 (Clicking individual question numbers allows for detailed analysis of individual questions.)
- 教師可鼓勵學生於表現較弱的題型多加操練 (Teachers can encourage students to practice more on question types where they performed poorly.)
- 遇到學生答對率較高，甚或比考評局合格率更高的題目，教師可讚賞及鼓勵學生 (When students perform well, or even better than the HKEAA correctness rate, teachers can praise and encourage them.)

Paper Question No.	Student Correctness	HKEAA Correctness	Author	Package	Year	Question No.	Topic	Level of Difficulty	Type
1	29	66	HKEAA	HKEAA Physics Public Exam Past Paper (HKCEE & DSE)	2013	15	Force and Motion	Normal	MC
2	64	75	HKEAA	HKEAA Physics Public Exam Past Paper (HKCEE & DSE)	2017	8	Force and Motion	Easy	MC
3	29	75	HKEAA	HKEAA Physics Public Exam Past Paper (HKCEE & DSE)	2008	6	Force and Motion	Easy	MC
4	17	50	HKEAA	HKEAA Physics Public Exam Past Paper (HKCEE & DSE)	2015	6	Force and Motion	Normal	MC
5	23	35	HKEAA	HKEAA Physics Public Exam Past Paper (HKCEE & DSE)	2013	13	Force and Motion	Hard	MC

- 試題分析報告
- 針對個別題目作出分析
  - 按學生的選擇分佈作出分析
  - 根據列表資料個別學生的學習表現作出分析

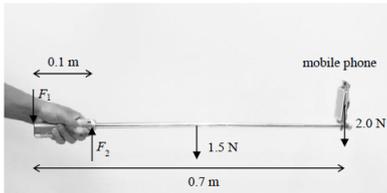
## 針對個別題目作出分析

Score Analysis   Topic Analysis   Level of Difficulty Analysis   **Question Analysis**

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Question 2 / 5

 Selfie sticks are popular nowadays. A uniform selfie stick of length 0.7 m is held horizontally as shown. Assume that the forces required to hold the selfie stick by the hand are represented by  $F_1$  and  $F_2$ , and  $F_1$  and  $F_2$  are perpendicular to the stick.

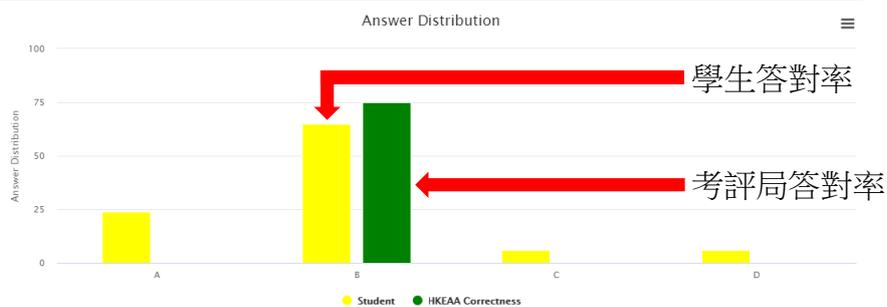


Information

Author HKEAA  
Level of Difficulty Easy  
Topic Force and Motion  
Remarks 2017 No.8

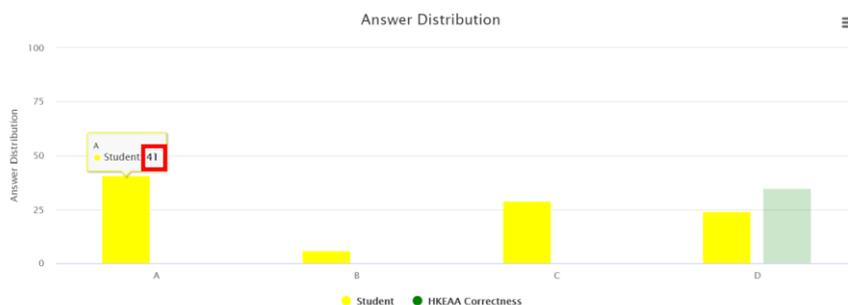
It is given that the weight of the selfie stick and the mobile phone are 1.5 N and 2.0 N respectively. Taking the mobile phone as a point mass, estimate the magnitude of  $F_2$ .

A  3.5 N  
 B 19.3 N  
 C  35 N  
 D  Cannot be determined as  $F_1$  is unknown.



- 在個別題目分析頁面中，教師可透過圖表比較學生答對率與考評局合格率。

## 按學生的選擇分佈作出分析



- 把滑鼠移至圖表中代表不同選擇的棒會顯示學生選擇的百分比。
- 教師可集中討論最多學生錯誤選擇的答案，並釐清誤導他們的錯誤概念。

## 根據列表資料個別學生的學習表現作出分析

Table Options ▾ Download

Class	Class No.	Student Name	Ranking	Score (%)	Choice
S1B	11	Student account 11	1	80	D
S1B	27	Student account 27	2	80	A
S1B	18	Student account 18	3	80	D
S1B	8	Student account 8	4	40	D
S1B	36	Student account 36	5	40	D
S1B	39	Student account 39	6	40	A
S1B	6	Student account 6	7	40	C
S1B	29	Student account 29	8	40	C
S1B	38	Student account 38	9	20	C
S1B	30	Student account 30	10	20	C
S1B	10	Student account 10	11	20	A
S1B	26	Student account 26	12	20	C
S1B	28	Student account 28	13	20	A
S1B	19	Student account 19	14	20	A
S1B	5	Student account 5	15	0	B
S1B	35	Student account 35	16	0	A
S1B	13	Student account 13	17	0	A

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- 在圖表下方的表格清晰列出了所有回答該題目的學生資料，包括班級、班號、學生姓名、排名、分數及選擇。
- 以上表中排名第二的學生為例，他是分數較高（80%）的學生中唯一答錯這題的，因此教師可於堂上邀請他分享選擇 A 答案的原因，從而了解能力較高學生也會答錯的原因。

## 實行建議

- 教師閱讀試題分析報告時可特別注意學生答對率與考评局合格率有明顯差異的題目，並於課堂內與學生討論。
- 教師亦可拍攝教學影片解釋多數學生答錯的題目，並上載至常用的學習管理系統（如教城 VLE 或 Google Classroom 等）供學生自學。
- 教師閱讀個別試題分析時可特別注意最多學生選擇的答案，並反思於教學上是否已把概念教授得清晰。
- 教師利用試題分析報告於課堂內與學生討論時，應把焦點放在所有學生的答對率與考评局合格率的比較，避免把焦點放在個別學生身上。
- 如欲了解更多詳情，請觀看[學校分享](#)短片。

## Implement Assessment for Learning through Comparing Student Correctness Rate with HKEAA Correctness Rate (Teaching Idea)

Through the Question Analysis Report function in the Online Question Bank (OQB), teachers can easily compare the student correctness rate with the HKEAA correctness rate (the passing rate of individual question in the public exam that year). In addition to understand the learning performance of students when comparing with all Hong Kong students, teachers can also enhance their teaching strategies according to their students' weaknesses in order to implement **assessment for learning**.

For each assigned paper, the OQB platform provides four different reports. Among them, the **Question Analysis Report** not only compares the student correctness rate with the HKEAA correctness rate, but also shows the distribution of student answers for each question in that paper. Teachers can focus on some questions and discuss with students to improve learning and teaching effectiveness.

### Question Analysis Report Page

The screenshot shows the 'Question Analysis' report interface. It includes a table with columns for Paper Question No., Student Correctness, HKEAA Correctness, Author, Package, Year, Question No., Topic, Level of Difficulty, and Type. The table lists five questions with their respective correctness rates and difficulty levels. Callouts provide context for various elements: a box highlights the 'Question Analysis' tab; a box explains that teachers can compare student and HKEAA correctness rates; another box notes that the level of difficulty is shown for overall analysis; a box points to the question number column, stating that clicking a number enters the analysis page; a box points to the student correctness column, stating that teachers can encourage students to practise more; and a final box points to the HKEAA correctness column, stating that teachers can praise students if their rate is high or higher than the HKEAA rate. At the bottom, a diagram shows the 'Question Analysis Report' leading to three analysis types: individual question, distribution of choices, and individual student performance.

Teachers can compare the student correctness rate with the HKEAA correctness rate of each question

The level of difficulty of each question is shown clearly for teachers to make an overall analysis

Click a question number to enter the analysis page of that question

Paper Question No.	Student Correctness	HKEAA Correctness	Author	Package	Year	Question No.	Topic	Level of Difficulty	Type
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Teachers can encourage students to practise more to improve their weak areas

Teachers can praise and encourage students if the student correctness rate is high, or even higher than the HKEAA correctness rate in some questions

Question Analysis Report

- Analysis on an individual question
- Analysis on the distribution of students' choices
- Analysis on the learning performance of individual student by the data in the table

## Analysis on an individual question

Score Analysis   Topic Analysis   Level of Difficulty Analysis   **Question Analysis**

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Question 2 / 5

Selfie sticks are popular nowadays. A uniform selfie stick of length 0.7 m is held horizontally as shown. Assume that the forces required to hold the selfie stick by the hand are represented by  $F_1$  and  $F_2$ , and  $F_1$  and  $F_2$  are perpendicular to the stick.

It is given that the weight of the selfie stick and the mobile phone are 1.5 N and 2.0 N respectively. Taking the mobile phone as a point mass, estimate the magnitude of  $F_2$ .

A  3.5 N

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C  35 N

D  Cannot be determined as  $F_1$  is unknown.

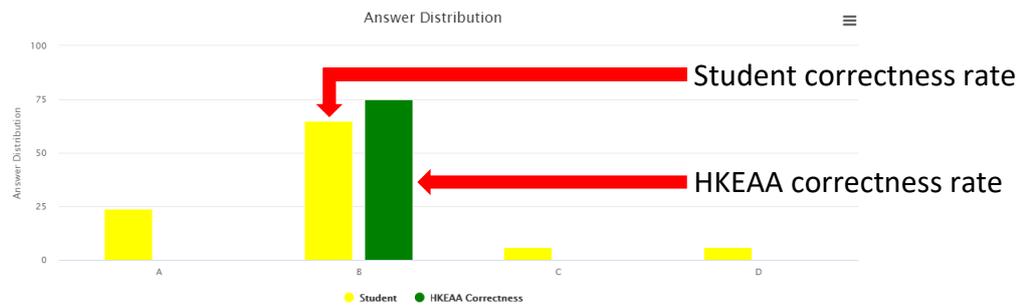
**Information**

Author HKEAA

Level of Difficulty Easy

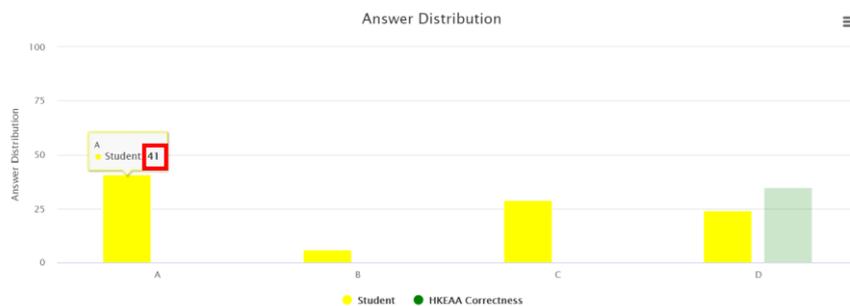
Topic Force and Motion

Remarks 2017 No.8



- In the analysis page of individual question, teachers can compare the student correctness rate with the HKEAA correctness rate through the figure.

## Analysis on the distribution of students' choices



- Move the mouse over the bar representing different choices in the figure to see the percentage of students answering each choice.
- Teachers can focus on the answers most students have wrongly chosen and clarify the wrong concept that misled them.

## **Analysis on the learning performance of individual student by the data in the table**

Table Options ▾ Download

Class	Class No.	Student Name	Ranking	Score (%)	Choice
S1B	11	Student account 11	1	80	D
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S1B	18	Student account 18	3	80	D
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S1B	38	Student account 38	9	20	C
S1B	30	Student account 30	10	20	C
S1B	10	Student account 10	11	20	A
S1B	26	Student account 26	12	20	C
S1B	28	Student account 28	13	20	A
S1B	19	Student account 19	14	20	A
S1B	5	Student account 5	15	0	B
S1B	35	Student account 35	16	0	A
S1B	13	Student account 13	17	0	A

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- The table below the figure clearly lists information of all students who have answered that particular question, including class, class number, student name, ranking, score and choice.
- For example, the second-ranked student in the above table is the only one who answered the question incorrectly among those students with higher scores. Therefore, the teacher can invite him/her to share the reason for choosing that answer in the class to understand why more capable students will also answer incorrectly.

### **Implementation suggestions**

- Teachers can pay more attention on the questions which have a significant difference between the student correctness rate and the HKEAA correctness rate when reading the Question Analysis Report, and discuss with students in the class.
- Teachers can also make teaching videos to explain the questions which most students answered incorrectly, and upload them to commonly used learning management systems (such as VLE of HKEdCity or Google Classroom) for students to learn by themselves.
- Teachers can pay more attention on the answers chosen by most students when reading the analysis of particular question and reflect on whether the concepts have been clearly taught.
- When using the Question Analysis Report to discuss with students in the class, teachers should focus on the comparison of the student correctness rate with the HKEAA correctness rate, and avoid focusing on individual students.
- For more details, please watch the clip of [school sharing](#).